

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A spectrophotometric measuring cell, ~~useful for automated reagent mixing and for handsfree physical cleansing~~ comprising: [[:]]

[[a.]] a measuring cell having a free fluid passageway throughout its inner bore from an inlet to an outlet, said measuring cell comprising a light-transparent measuring tube ~~having~~ characterize by a longitudinal axis *a* and [[a]] an inner bore of a diameter *b*,

[[b.]] a shaker, accommodated in ~~said tube's~~ inner bore of said measuring tube, said shaker being operative ~~bore; having means to~~ strike back and forth along the longitudinal axis *a*, said shaker comprising a brush of an outer diameter *b*, said brush being [[is]] adapted to provide an effective physical cleansing of the inner wall of the cell at the time the shaker is moving along the longitudinal axis ~~its course~~; and

[[c.]] an actuator, located outside [[the]] said tube, adapted to ~~reversibly~~ actuate said shaker ~~to a predetermined rate and course~~;

~~wherein fluids and/or reagents filling the measuring tube are effectively mixed by means of at least one of the shaker's strikes to obtain a homogenized solution and wherein a necessity of manually cleansing routine is thus avoided.~~

2. (Currently Amended) The measuring cell assembly according to claim 1, ~~wherein the spectrophotometric measuring cell further~~ comprising a detector ~~having means to measure either at least one of a monochromatic wavelength detector and~~ [[or]] a multi-channel RGB light emission detector ~~of a broad spectra range~~.

3. (Currently Amended) The measuring cell assembly according to claim 1, wherein the light-transparent measuring tube comprises at least one of ~~is made of~~ a light transparent glass, quartz and [[or]] a polymer.

4. (Currently Amended) The measuring cell assembly according to claim 1, wherein at least a portion of the shaker is made at least in its portion of stainless steel.
5. (Currently Amended) The measuring cell assembly according to claim 1, wherein the brush is made of nylon fibers.
6. (Currently Amended) The measuring cell assembly according to claim 1, wherein the actuator is at least one electromagnetic coil, adapted to actuate the shaker magnetically.
7. (Currently Amended) The measuring cell assembly according to claim 1, wherein said actuator comprises comprising at least two electromagnetic actuators, at least one of said electromagnetic actuators being adapted to move the shaker upwards in a first direction along said longitudinal axis, and at least one of said electromagnetic actuators being adapted to move the shaker downwards in a second direction being opposite said first direction along said longitudinal axis.
8. (Currently Amended) The [[A]] measuring cell according to claim 9 as defined in claim 1, useful for water systems, selected from and wherein said fluid comprises water from at least one of a swimming [[pools,]] pool, a water treatment facilities, facility, a sewage treatment plants, plant, a drinking water systems, system and a cooling tower towers, or any on-line measurement of water.
9. (Currently Amended) The measuring cell according to claim 1-claim 8, especially useful for swimming pools, having further comprising means to measure at least one of parameters selected from pH, Redox, free chlorine content, light scattering, turbidity and temperature of a fluid located in said measuring tube.
10. (Currently Amended) A method for automatically mixing of fluids and/or reagents at least one fluid and at least one reagent in a spectrophotometric measuring cell and for providing hands free cleaning physical cleansing of an [[the]] inner core of the spectrophotometric measuring cells, cell, the method comprising:

providing a spectrophotometric measuring cell having a free fluid passageway throughout its inner bore from an inlet to an outlet, said measuring cell including a light-transparent measuring tube having a longitudinal axis a and an inner bore of a diameter b , a shaker, accommodated in said inner bore of said measuring tube, said shaker being operative to strike back and forth along the longitudinal axis, said shaker comprising a brush of an outer diameter b , and an actuator, located outside said tube, adapted to actuate said shaker;

[[a.]] filling the measurement cell with ~~fluids~~ fluid;

~~b. striking-actuating the shaker to strike back and forth at least one time once,~~
~~said so the brush thereby cleaning is physically cleansing the inner wall of the measuring tube;~~

[[c.]] calibrating for zero reading;

~~d. flashing-flushing the measurement cell with fresh fluids;~~

[[e.]] sealing the cell's ~~outlets~~ outlet;

[[f.]] filling said cell with at least one fluid sample sampled fluids and/or and at least one reagent, thereby obtaining reagents utilized for a photochemical reaction so a non-homogenized admixture; and is obtained

[[g.]] actuating striking the shaker to strike back and forth a plurality of times, thereby obtaining [[so]] a homogenized solution, ~~is obtained and so bubbles of entrapped air or gas are purged from the cell;~~

~~h. measuring a predetermined spectrum of the solution;~~

~~i. opening the cell's outlets and flashing the colored fluids out of the cell by means of fresh fluid.~~

11. (New) A method according to claim 10 and wherein said actuating also comprises purging entrapped gas from said cell.

12. (New) A method according to claim 10 and also comprising measuring a predetermined spectrum of said homogenized solution.

13. (New) A method of cleaning an inner bore of a measuring tube of a spectrophotometric measuring cell, comprising:

providing a spectrophotometric measuring cell including a measuring cell having a free fluid passageway throughout its inner bore from an inlet to an outlet, said measuring cell

comprising a light-transparent measuring tube having a longitudinal axis and an inner bore and a shaker, accommodated in said inner bore of said measuring tube, said shaker including a brush;

filling the measurement cell with fluid; and

actuating said shaker, including said brush, to strike back and forth at least once along said longitudinal axis, said brush thereby cleaning said inner bore of said measuring tube.